

Comments on DNR draft Cherry Point Management Plan
By John Boettner

As a State biologist, hydroacoustics specialist, environmental specialist, consultant and now retired volunteer, I've spent more than 30 years witnessing the triumph of the Cherry Pt fishery when it exceeded 15,000 tons, and now the decade long demise as the population fails to recover beyond 2,500 tons (in spite of the absence of fisheries). I've seen enough to realize that a pivotal contributor to the food chain is being forsaken as an acceptable casualty in the enduring quest for progress. Given that Cherry Point herring haven't surpassed the 2,500 ton threshold in over a decade, this "canary in the mine" isn't dead yet, but as someone with a vested interest in this precious resource I question whether we can even see the obviously ailing canary.

Has anyone considered a management plan that weighs the current level of Cherry Pt industrial infrastructure against the carrying capacity of the landscape? Even though the precedent is established for supporting the addition of another pier facility, nothing in the monitoring data suggests that another vessel facility at Cherry Pt is warranted, especially a facility of the size or scale of risk proposed, and in light of inadequate mitigation that fails to compensate for impacts.

Given what we know, one has to beg the question: "Provided that DNR's management decision poses such a calculated risk to a chronically depressed herring stock, what rationale does DNR use to justify that they are managing Cherry Pt for the public benefit? What would be the outcome at Cherry Pt be if it were managed according to Precautionary Principles?

The facts are that the Cherry Pt herring weight and length at hatch has demonstrated that it is not only low compared to historical records, but also low compared to other herring stocks on the west coast. This data alone should garner concern for the resource because of the evidence showing that there is a systemic problem inherent within the stock; in fact it should validate the case for listing Cherry Pt Herring under ESA.

One of the disturbances to the Georgia Straits water quality that is not discussed in sufficient detail here is the water used in the industrial wastewater permits; freshwater diverted from the Nooksack River is then discharged at depth into marine waters after industrial processing. Given the Nooksack River no longer discharges to Lummi Bay, it is worth comparing the different scenarios over time; contrast the absence of the Nooksack Rivers natural stream and sediment flow into Lummi Bay receiving waters, with the effects of artificial diversion through industrial discharge pipes in the various configurations (that are not disclosed in this document). What is the overall impact on the Cherry Pt aquatic landscape as a result of these changes?

The truth of the matter is that the DNR management plan intends to add another major pier facility that will not only directly impact the herring resource and habitat; it will multiply the risk of another maritime disaster. As a landowner on Samish Island where we see 95% of the oil destined for Washington State pass our shorelines in Haro Strait

(I've counted as many as eight vessels at one time in Haro Strait), the vessel traffic here has to be some of the most congested in the State, yet as I understand it this area isn't even monitored on the radar traffic control system.

Right after the Olympic Oil Pipeline disaster in Whatcom Creek and Squalicum Harbor, oil barges started mooring temporarily in Haro Strait, and continue to do so even though the Olympic Pipeline has been back in operation for years. In addition, not only were we forced to accept the resulting Whatcom Creek sludge discharge into Bellingham Bay from the Olympic Oil Pipeline brake, we also have to accept the risk of another land-based pipeline brake. From our perch on Samish Island, if we aren't under siege by land based pipelines, it will be an incident by sea. On Samish Island, we are surrounded by a network of hazardous infrastructure, and helpless to do anything about it.

Given industries recent land sales to developers, the reliance on industry to act as nature's keeper should not be considered an entirely wholesome enterprise.

Please provide more information on the history of dredge activity at Cherry Pt.

Given that industry discharges stormwater effluent to Terrell Creek, is monitoring conducted at its mouth where the discharge is commingled effluent from several industry sources prior to entering Birch Bay?

What happened to the plan to reconnect the Nooksack River to Lummi Bay? Has anyone suggested the possibility that the proponents of the Gateway project could sponsor the Nooksack reconnect restoration? The Gateway project could be a little more palatable with this scale of mitigation; but even this doesn't come close to addressing the threats to property owners at risk to oil spills. However, if they financed a vessel tracking system that covers the congestion in Haro Strait, that would come closer to addressing the concerns of landowners; in fact, I think this alternative provides what I consider compensatory mitigation directed towards hazardous materials source control. Even though increasing radar coverage is not designated as "in-kind" mitigation, it is more "in kind" than many of the mitigation measures Gateway proposes.

Shoreline Characteristics Attributed to Anthropogenic Sources

In order to provide a more realistic picture of landscape transformation that has occurred at Cherry Pt over time, please characterize a landscape that reflects the human activity over time, some of which are outlined as follows:

- Fill placed at the landward end of some overwater structures extending beyond -2.0 ft tidal elevation (relative to 0.0 ft MLLW).
- Overwater structures constructed with creosote treated pilings, pilings so numerous and closely spaced that they impede sediment movement and flow characteristics.
- Outfall discharge pipes attached to piers in an ad hoc manner at varying depths and distance from shoreline, these discharges can influence water quality depending on the varying factors of deployment (i.e., depth of discharge in

- relation to depth of sediment, distance from shoreline, configuration of diffusion ports, etc.).
- No matter how the discharge pipes are configured, warmer fresher effluent will be more buoyant relative to colder ambient marine receiving waters. How are these physical dynamics portrayed?

Physical Disruption

The various shoreline modifications have been a feature of the Cherry Pt landscape so long, it is difficult to envision what conditions existed prior to development, much less quantify the effects of change over time. Never the less, it is important to be realistic about the present day aquatic landscape characteristics, for instance a more textured portrayal of the protraction of physical encroachments is necessary for this exercise to be effective.

Language that glosses over the imposition of intrusive structures such as the Intalco and ConocoPhillips Piers should be avoided:

“Large boulders are prevalent north of Cherry Point, near the Intalco facility, and immediately south of the ConocoPhillips refinery, providing substrate shelter for mobile and sessile organisms (ENSR 1992a).

These (and other) comments imply that we are supposed to assume that both of these antiquated obtrusive structures are beneficial to the Cherry Pt ecosystem. To accept such a premise is as misdirected as believing herring will spawn on any type of substrate, forgetting that infrastructure such as marinas, creosote treated piling, breakwaters, etc, have encroached on herring spawning ground habitat in several locations in Puget Sound (i.e., marinas in Seabeck Bay in Hood Canal, and Quartermaster Harbor in Puget Sound). In addition, until we know more about the impact of an invasive species such as *Sargassum*, we shouldn't offer suggestions about negative or positive effects of *Sargassum*.

It is time to distinguish between gray literature and facts; if this exercise has any hope of success, we have to refuse to revert to a time when we accepted the notion that the Cherry Pt area was: “Devoid of biological life” prior to construction of the first pier at Cherry Pt.

Water Quality Concerns

The potential for effluent to collect near the surface should be largely dictated by a combination of industry through-put and Frazier River discharge; in addition, modeling has demonstrated that the net direction of effluent flow will be towards the shoreline where herring spawning habitat resides. The potential for this scenario is real enough to require a more complete investigation and subsequent action plan.

Cherry Pt Drift Cell

During personal discussions in 1976 with an older resident of Sandy Point beach who called himself the “Mayor of Neptune Beach,” the “Mayor” stated that he lived on Sandy Point beach prior to the construction of the ConocoPhillips Pier, he emphasized that the beach went through a dramatic loss of fine substrate after construction of the Ferndale

Pier. The report on Cherry Pt drift cell migration helps corroborate the Mayor's contention. Contrary to reports that Sandy Point residential bulkheads being the cause of the local erosion is not the complete story, it also likely that the drift cell migration was disrupted by fill from ConocoPhillips (Ferndale) Pier; this was probably the primary cause of the loss of beach substrate at Sandy Point, precipitating the need for erosion control.

DNR Leases

From what little experience I had dealing with the BP lease, I can say a transparent leasing process would be a vast improvement over the current system. When a lease lasts 30 years, there is no reason it shouldn't go through a public notice process.

Until we can demonstrate a willingness to be proactive and more forthcoming with the facts about Cherry Pt and accept them as they are, this will be just one more exercise that will not only seal the fate of Cherry Pt herring, it will disenfranchise a dedicated few who actively volunteer efforts to support sustainable ecosystems and intergenerational equity.

Caged Mussel Studies

After having personally supervised caged mussel studies sponsored by DNR in 1998, 1999, and 2000, I hope that the current administration of DNR is willing to reconsider using this scientific method as a means of monitoring DNR activities in the future. Even though the work we conducted could be considered a pilot study, the methodology was not only scientifically robust enough to warrant further investigation, the results were very compelling.

A copy of our work can be found at the following link:

<http://www.ecosystemsfirst.com/images/studies/Puget%20Sound%202000%20Caged%20Mussel%20Study%20Final%20Report.pdf>

This work examined a series of deployed *in situ* caged mussels at Cherry Pt for three years (and other sites in 2000). It was not only a study of bioaccumulation of Polyaromatic Hydrocarbons in caged mussels; it was one of the first examinations of temperature profiles under condition that duplicated the exposure conditions of herring spawn in the field.